

11.947 CRE – CDD DUSP – Media Lab Joint Faculty-Student Seminar

New Century Cities:

Creating Value through Urban Design and Placemaking

Session 2

MIT/Dennis Frenchman and Susanne Seitingner

Course Updates

Readings

Managing the Discussions

Research Agendas

Timetable for Papers/Projects

Date for Final Session: Nov.24?

Interest in a Tour of Stata

...

Digital Place-making

A. Layering Technology in space

- *Themes and dimensions*
- *The shape of digital space – “permeability”*

B. Precedents and prototypes

- *Shopping place: Newbury Street*
- *Event place: Lyons Festival of lights*
- *Education place: Sapiens*
- *Central Place: one north Singapore*
- *Central place: Seoul DMS*
- *Entertainment place: The Ride*

Layering Technologies in Space

Themes

1. *Maintenance / sensing*
2. *Movement*
3. *Place information*
4. *Selling and buying*
5. *Meetings*
6. *Magic / event places*

Dimensions

- **Street level:** *connected to physical objects, places, public display devices and sensing*
- **Personal level:** *communicating and information containing devices*
- **Cyber level:** *meta sources of aggregated data, monitoring, programming that support the street and available to its users.*



Pervasive surveillance

Smart Trash cans

Intelligent Street Lamps

A Wireless Network of Sensors Scanning the Environment

- Maintenance
- Movements
- Place Information
- Transactions
- Communications/Meetings
- Events/Celebrations

PERSONAL — Hand-held Field Support

2. Movement

- *Traffic management*
(pavement markings; signs; stop lights]
- *Emergencies*
- *Transit stops*
- *Parking management*
- *Communication with “smart vehicles”*
- *Way-finding*
[GPS; address identification]



3. P l a c e Information

- *Location specific information*
- *Stories and interpretation*
- *Maps and orientation*
- *Portals to other times other places*



- Maintenance
- Movements
- Place Information
- Transactions
- Communications/Meeting
- Events of Streets

Digital Portals

"Collective Memories" of the Place

Context-Aware Table

Augmented Space. Urban Context

4. Selling and buying

- *Programmable signs and advertising*
- *Thin shops*
- *Customer sensing*
- *Ubiquitous points of sale [no check-out]*
- *Advanced Vending (you name it)*



Wireless E-Banking Infrared Membership Confirmation

Welcome, Mike!
TODAY'S SPECIAL FOR YOU
enjoy a free
Hagen Das Ice Cream



Thin Shop



- Maintenance
- Movements
- Place Information
- Transactions**
- Communications/Meeting
- Events/Celebrations

5. Meetings

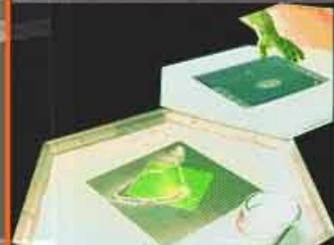
- *Ubiquitous computing and wireless access*
- *Social links / Business links / Community links*
- *Places to meet or congregate that support digital access*
- *Extended working space*
- *Distributed conference center*
- *“smart threshold” -- “guarded” interface*



Sensors and a voice recognition system outside and inside the digitally enhanced threshold indicate a person's approach and identity



Smart "Threshold"



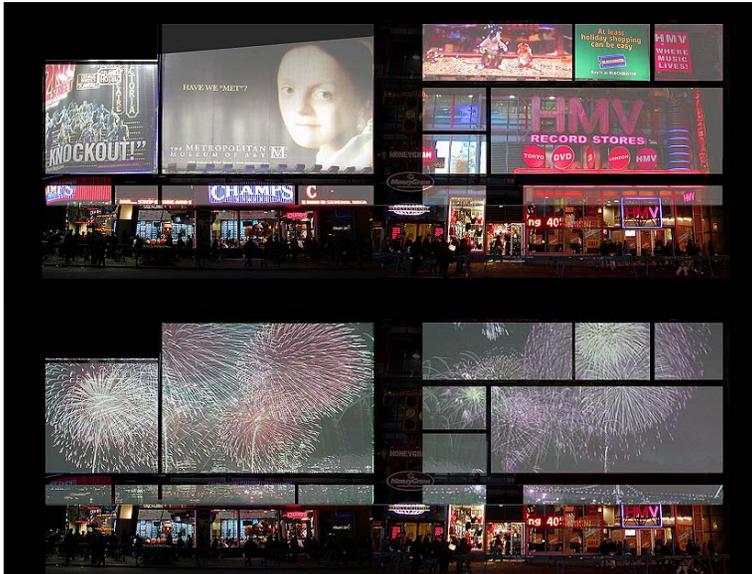
Context-Aware Tables

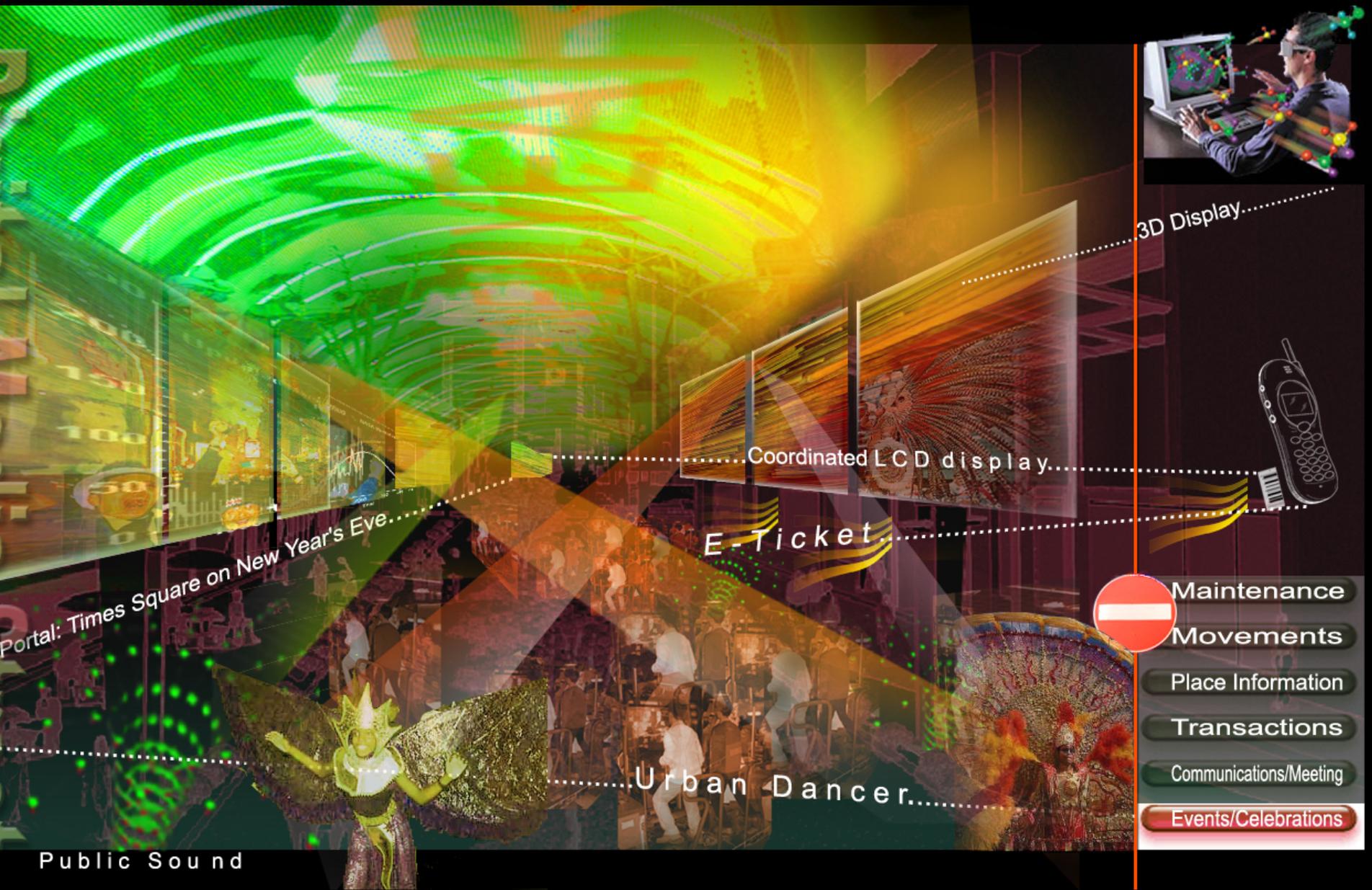
- Maintenance
- Movements
- Place Information
- Transactions
- Communications/Meetings
- Events/Celebrations

Friend Finder

6. M a g i c /Event places

- *Street “clothes” (lights, decorations)*
- *Coordinated media dimensions of “movement”, “place”, and “transaction” create event setting and mood*
- *Artistic expression or political statement*





Portal: Times Square on New Year's Eve

Coordinated LCD display

3D Display

E-Ticket

Urban Dancer

Public Sound



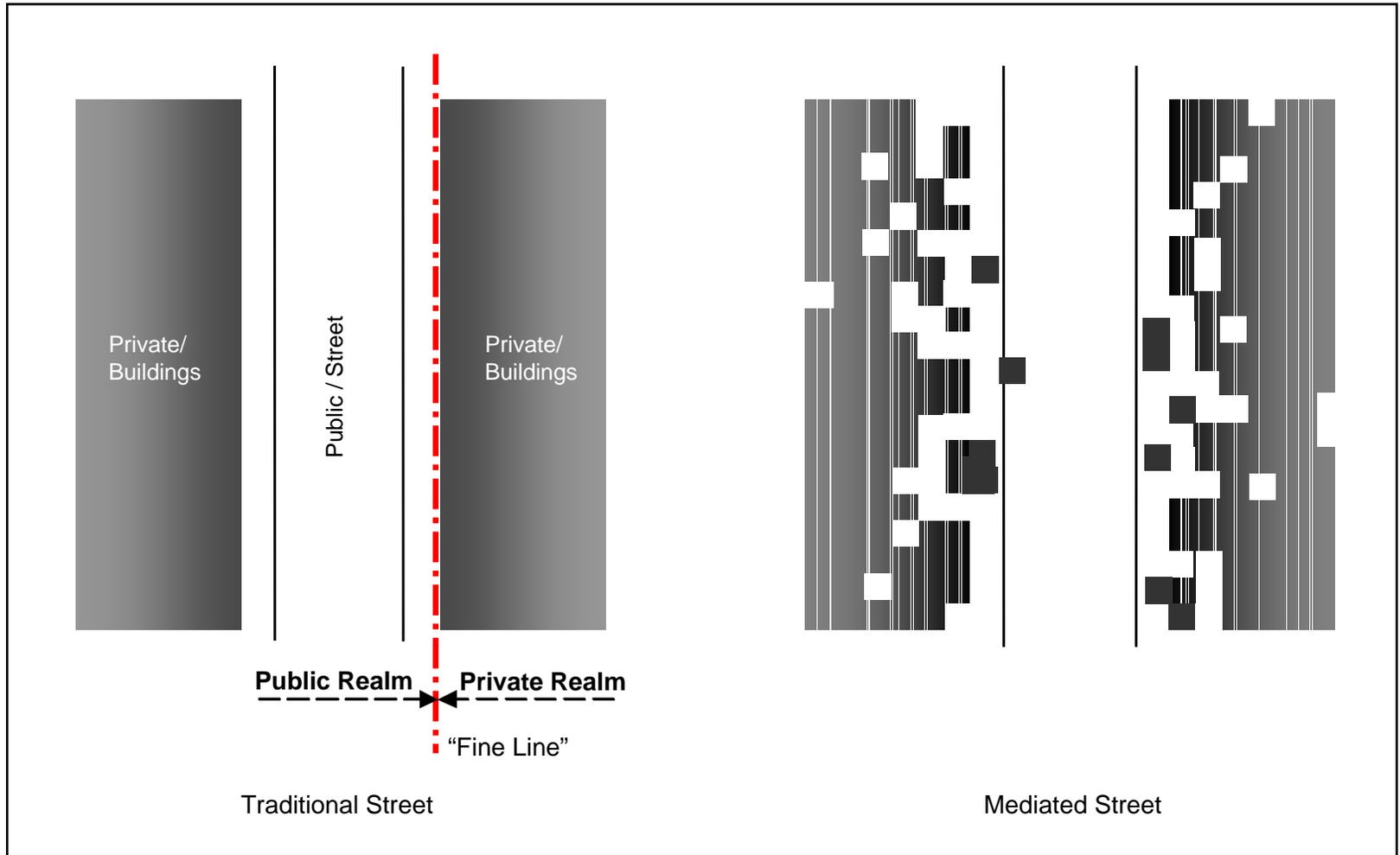
- Maintenance
- Movements
- Place Information
- Transactions
- Communications/Meeting
- Events/Celebrations

The shape of digital space

How do elements combine to affect the physical design of a place? How is it different from a conventional place?

- *New media blurs the line between public and private realms.*
- *Aspects of one realm can be found deep within the other.*
- *Most implications at edge conditions, like streets or districts.*
- *Deconstructing edges between activities, replacing them with more complex, “permeable” forms.*

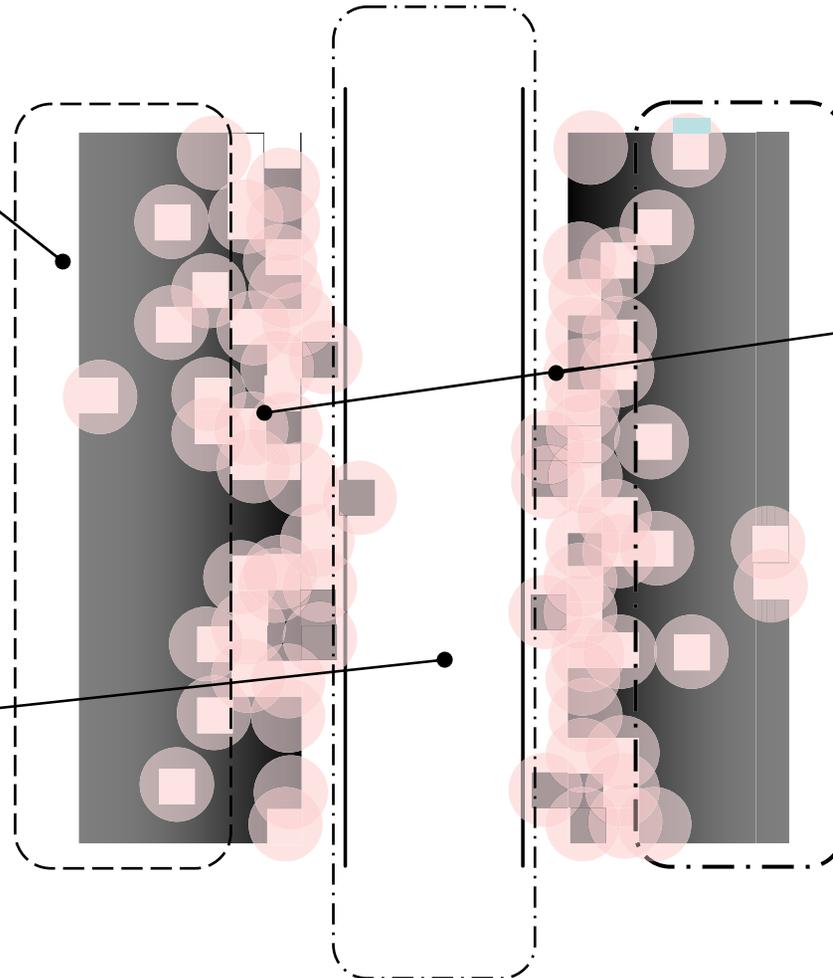
Deconstructing the edge



The permeable realm

Private realm:
content/
production;
access
controlled by
tenant/owner

Public realm:
movement/
connection;
access free
but sensed,
"hyper-public"



Permeable realm:
interaction/
transaction;
access by
mutual consent
between
provider and
user;

Discussion Questions

Who has examples of new technologies in public space? What is the potential for more? What does it mean when they interconnect?

Will media reinvigorate and expand the public realm? Do successful public places have media associated with them?

How will this layering change the dynamics of use and value in the city?